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ABSTRACT

Investigated for purposes of comparison with American counterparts were teaching styles used in eight classes in special schools for the educable mentally handicapped (EMH) in the Netherlands. Ss tended to be placed in the special schools earlier than EMH students in the U.S. are placed in special classes. Classes were observed to determine teaching style, and children were administered a version of the Intellectual Achievement Responsibility Questionnaire, a measure of locus of control. The level of intellectual stimulation and types of learning opportunities offered were evaluated along the following parameters: level of cognitive demands, variability of cognitive demands, sources of cognitive demands, richness of activities, pupil task involvement, degree of individualization, sources of individualization, and modes of teacher influence. Comparison with American classes revealed that Dutch teachers depend much less on recitation, discussion, and individual interactive tutoring than American teachers, that Dutch children displayed a much higher degree of self-direction and persistence than American children, and that Dutch children showed a slightly lower level of internal locus of control than American children. Noted is the lack in the Netherlands of consistency in pedagogical theory, curriculum, or teaching style and the high degree of reliance on the individual teacher in supervising instruction. (DB)

Teaching Styles in Schools for Educable
Mentally Retarded Children
in the Netherlands

-- A Report to the Spencer Foundation --

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This report to the Foundation is a general summary of the study and its findings. On completion of further analysis of some of the quantitative data, more detailed reports will be prepared for publication. Copies of these reports will be sent to the Foundation.

Introduction

The purpose of this study was to identify teaching styles in representative special schools for mildly retarded children in the Netherlands and to compare these styles with those of American teachers of retarded children previously studied by the author. Because of differences between the United States and the Netherlands in cultural background of children and teachers, in educational traditions, and in educational policies governing school programs, it seemed likely that different teaching styles might be found. If so, these differences would be helpful in illuminating some of the current issues in the United States concerning the education of the retarded and might point to new approaches in training teachers.

The significance of this type of comparative research derives from a common social and educational problem that is found in most modern

societies--the problem of educating children who are identified as mentally retarded but who occupy a borderline category between "normal" children and those children suffering from clear-cut physical, sensory, neurological, and psychological handicaps that clearly indicate an inability to be completely self-sustaining and self-supporting without special training, rehabilitation or sustained protective support. Members of this borderline group attain their status as defectives almost exclusively as a consequence of school failure during the period of elementary schooling. Most modern societies provide a system of special education for these children that segregates them either into special classes within the elementary school (as in the United States), or in special schools (as in the Netherlands).

The problem with this borderline group of children is that they experience so much difficulty with the regular elementary school program and pose such a problem to teachers that procedures are developed for placing them elsewhere. Yet these children have the abilities to attain some level of proficiency in basic school subjects and to lead reasonably normal lives as adults. (These facts have been clearly established by studies in both the United States and in Europe.) During the years of compulsory schooling these children attain the status of "defective." While occupying that status they pose a challenge to those who set educational policy and those who must teach these children. What should be the goals of their education and how should they be taught? Unlike the severely retarded or children

who have clear-cut physical or sensory handicaps. there are no widely accepted remedial or compensatory strategies for working with these children, partly because the nature of their disabilities is so poorly understood and partly because the role of formal education for preparing them for adult life has never been clarified. If the goals of elementary education should be the same for the educable retarded as for normal children, the evidence from a number of studies that compare the efficacy of special education placement with keeping the mildly retarded in the regular class suggests that the regular class fosters better academic achievement and intellectual growth.

In recent years another dimension of this problem has emerged sharply to accentuate the political aspects of this problem. The 'educable mentally retarded' in disproportionately large numbers come from poorer economic backgrounds and minority ethnic groups. Current questioning of the validity and fairness of intelligence tests, the controversy over the genetic and social factors in intellectual development, alleged teacher bias that is induced by IQ labels, and the increasing number of legal suits brought against school systems as a result of alleged misplacement of minority group children in special education have all heightened public concern with this question.

Since 1969 the author has conducted a series of studies of the "cognitive demand styles" of teachers of the educable mentally retarded. He has compared these styles with those found in regular elementary classes. These studies suggest that most

of the daily instruction in both special classes and regular classes is carried out principally through the medium of verbal interaction between the teacher and pupils--discussions, recitations, etc. To the extent that there is individualization of instruction, much of it is carried out or implemented by direct verbal communication by the teacher. Consequently, an observation schedule, the Individual Cognitive Demand Schedule, was designed to record and classify the cognitive demands of the teacher's instructional interactions. Data from this instrument revealed that the cognitive level of instruction in special classes tended to be quite low and that personalized opportunities for intellectual stimulation through classroom dialogue were quite unevenly distributed among pupils. In the elementary classes studied, the opportunities for intellectual stimulation for low achieving children were significantly less frequent than those provided for high achieving pupils.

The Netherlands is an interesting country in which to do a comparative study on teachers' cognitive demands with mildly retarded children. First, there is a long tradition of efforts to develop excellent provisions for handicapped persons. The Netherlands has extremely specialized programs for the education and rehabilitation of the handicapped. The government invests relatively high proportions of available funds in such programs. Second, there is a strong educational tradition of intellectual rigor and selectivity in the school system. Third, there is a greater variety of school types than in the United States. At both the elementary and secondary levels of education,

schools vary more in function, populations served, in the policies that govern their programs, and in the composition of the leadership groups that formulate policy. This variety is due partly to Dutch concepts of democracy, to a tradition of social acceptance of diversity, and partly due to the greater seriousness with which matters of social and educational doctrine are taken in the Netherlands.

It was anticipated that school variations in theoretical orientation to teaching the mildly retarded would be found and that these differences might be reflected in the teaching styles found in the schools. It was also anticipated that generally the cognitive demands teachers would make on children would be at a relatively higher level, with more equitable attention being paid by the teacher to individual children during classroom instruction. (On the other hand, it was also possible that, given the rigor and selectivity of the general educational system, these children, once identified as retarded, might be treated as more 'hopeless', and hence given a less stimulating type of school experience.)

Basically the study was carried out for the light it might shed upon how school experiences for children viewed in both societies as occupying a marginal status position are shaped by different cultural and educational traditions. From a more practical point of view, it was hoped that a close examination of teaching styles in a different context might reveal elements of teacher competence that could help in American efforts to improve teacher education.

Special Education in the Netherlands

Throughout the Netherlands special education is carried out in separate schools rather than in special classes within other schools. The system is very differentiated. Thus there are special schools for the mildly retarded ('debiel'); the severely retarded; children with learning and behavior problems; the hard of hearing; the deaf; children with speech disorders; the visually impaired; the blind; the orthopedically handicapped; children recovering from long, serious illnesses; children who are sickly ('open air schools'); epileptics; and emotionally disturbed children.

The mildly retarded constitute about 44 percent of all children in special schools--some 34,000 pupils in 304 schools. Schools for children with learning and behavior problems are relatively new, having grown from only 4 schools in 1950 to 175 in 1972. They now enroll approximately 18,000 children, or about 26 percent of all children in special education. Thus about 70 percent of all children receiving special education in the Netherlands are children whose disability has been identified primarily on the basis of inability to master the learning tasks of the early grades of the elementary school, and not on the basis of any clearly and independently identifiable physical, sensory, neurological, or psychological impairment.

How does a child in the Netherlands come to be identified as 'debiel'--mildly retarded. Approximately half of the children in the "debielenscholen" enter during the year after they have

been in the first grade of the elementary school (comparable to the American first grade in age of entry and general curriculum). By the end of the third grade, over 90 percent of all children destined for this type of special education have been placed (compared with approximately 50 percent for the United States). As in the United States, the regular elementary teacher tends to initiate the referral for special placement. Then the elementary school principal becomes involved. If, in the judgment of the teacher and the principal, a child should be placed in a special school, the parents must next be consulted. The parents must give formal consent to a professional examination of the child, and if the examination indicates it, placement in a special school. Usually a specific school is recommended prior to examination.

The professional examination is undertaken by a team of specialists who serve the particular special school to which the child is recommended. Typically the child undergoes a psychological examination by the school psychologist, a physical examination by the school doctor, and an educational-diagnostic examination by the headmaster of the special school (or by a special educational diagnostician--the "orthopedagoog"). In addition a social worker submits a case report on the child's family and neighborhood situation. The team of the psychologist, physician, headmaster, educational diagnostician, and social worker then conducts a case conference at which time a decision for or against placement is made.

Each class in the special schools for 'debielen' typically enrolls approximately 16 children. The classes are age graded. The youngest children are usually eight years old. The age composition of classes, however, usually spans a two-or-three-year range. This is partly because an attempt is made to place children with teachers whose personality and skill are compatible with a child's needs, and partly because of the curricular level of a class in basic school subjects. Generally a child progresses from one class to an older class each school year.

The curriculum of the special school centers on the basic elementary school subjects of language, reading, and arithmetic, coupled with some work in 'general knowledge' (social studies and health). Usually the academic work is concentrated during the morning hours. In the afternoon the program tends to be devoted to a variety of non-academic activities, such as arts and crafts, music, dramatics, shopwork for boys and domestic arts for girls. All children receive physical education for several hours a week, usually including swimming instruction. The program of most schools extends through the eighth grade. During the last two or three years, more and more emphasis is placed upon some vocational or pre-vocational training. Approximately half of the children go on to lower level vocational schools for two or three more years after they complete the special school. Almost never does a child return to the regular elementary school once he is placed in a special school.

The program of the special school must meet certain governmental standards for number of hours of instruction in the various subjects. The actual scheduling and curricular planning is typically

left to the teacher, as is the selection of materials (texts, etc.). In a small number of schools there is a coordinated, school-wide approach to curriculum development and evaluation, but they are the exception. More typically much of the year-to-year integration of a child's program is limited to a cursory reporting of achievement levels in the basic school subjects to the child's next teacher. The law requires that each child in special school be reevaluated each year. Teachers write a report of the child's work for the year and the consulting pupil-personnel team periodically evaluates the child.

Teachers in 'debielenscholen' received their training in the same teacher training schools that prepare teachers for the elementary school. They typically have earned an extra diploma for special education by taking one year of special training beyond the basic three-year program for an elementary teacher's certificate. The training typically is rather theoretical, but does include a period of practice teaching. While special teachers receive slightly higher salaries than do elementary teachers, there is apparently a shortage of qualified teachers and a relatively high turnover within many schools. Teaching retarded children carries relatively low occupational status.

The Sample of Schools

During most of 1972 the author corresponded with several leaders in special education in the Netherlands concerning the selection of schools, the methodology of the study, and the recruitment of research assistants. In the autumn of 1972 Dr. Adriana Wilmsink, Director of the Pedotherapeutisch Instituut of Amsterdam,

enlisted the cooperation of the Inspector of Special Education of the public schools of Amsterdam in obtaining permission to conduct the study and in selecting the schools in which the study was done. An attempt was made to come as close as possible to matching the sample studied in the United States in a large mid-western city. Three schools were selected that represented quite different areas of the city. The problem of identifying other schools that represented different theoretical approaches was left until the author could explore the situation at firsthand early in 1973.

The author went to Amsterdam early in December for one week to make final arrangements with the schools and to employ research assistants. At that time he met with the headmasters of the three schools, explained the study in detail, and arranged for the selection of the classes to be studied. Eight classes were selected, three each from two schools, and two from the third. The teacher of each class had at least one year of experience in teaching this type of class. The children ranged in age from nine to twelve.

The first school, School A, is located in the older, central part of Amsterdam. It was the first public school for the mildly retarded to be established in the Netherlands, founded in 1899. School A enrolled 273 pupils in 17 classes. The children come mainly from two large traditionally working class neighborhoods in the older part of Amsterdam. The headmaster had held that position for the past 12 years. The large majority of the teachers are under 30 years old. Apparently the teacher turnover in the school is smaller than in most schools of this type.

In general the atmosphere of the school is very warm and relations among the faculty are congenial. It is the impression of the author that the headmaster has created the congenial climate of the school. He is a dedicated professional person, a warm father figure who encourages and supports his staff, and is sincerely fond of the children.

The two classes selected from the school were both taught by experienced, confident young female teachers. One had taught at the school for seven years, the other for four years.

The second school, School B, is located in the western part of Amsterdam in a residential area of houses, apartments, shopping areas, churches and schools all designed and built after World War II, mainly in the late 1950s. School B is located in three "temporary" one-story wooden buildings in a poor state of repair. The school was founded in 1957. It enrolls 200 pupils in 12 classes located in three different buildings. The children come from an extensive area constituting four distinct neighborhoods (most children must come by bus). About 15 percent of the children come from neighborhoods that are characterized as "socially deprived" and the rest from predominantly lower to lower-middle class area. The school experiences an unusually large amount of vandalism apparently by neighborhood youths. The headmaster of the school was an acting headmaster for the 1972-73 school year because of the resignation of the regular headmaster due to illness. The school board was in the process of selecting his successor, a lengthy procedure that left the school in a state of

uncertainty for most of the school year. The teaching staff of the school was relatively young and inexperienced. The climate of the school reflected the uncertainty about the headmastership. The teachers complained of lack of instructional materials, apparently because the ordering of new materials had been postponed until a permanent headmaster was selected.

Three classes were selected in this school. The teacher of the youngest group (8-10) was a young woman with three years of experience. The teacher of the next older group (10-11) was an older, motherly woman who had ten years experience in regular elementary schools before becoming a teacher in this school. The third teacher was a young man with two years experience in special schools after finishing teacher training school. He taught the oldest group (11-13). The acting headmaster preferred to place children with difficult behavior in the third class and emotionally insecure children in the second class.

The third school, School C, is located in the northern section of Amsterdam, on the other side of the Ij River. Founded in 1934, the school is located in an industrial area with older residential sections and shopping streets. Children attending this school come from either this area or from outlying rural villages. Thus there are some children from farm areas that lie to the north of the city as well as from the predominantly working-class northern part of the city. The school enrolls 192 children in 12 classes. The headmaster had held that position for two years, having served as a teacher there for 18 years. He is an energetic,

friendly man who seems to maintain a supportive, laissez-faire relationship with his faculty. He takes pride in the athletic program of the school and the growing numbers of children who go on into vocational education. The three classes selected from this school for the study overlapped greatly in age composition. The grouping appeared to be more on the basis of social and physical maturity than chronological age. The least mature group was taught by a young, rather insecure woman with relatively little teaching experience. The other two groups were taught by men who both had experience and much self confidence.

The program in each school was largely determined by the individual teachers and by certain traditions in the school. The learning activities experienced by children were primarily a function of the teacher's organization and style, and secondarily a function of those instructional materials that were available. Very little effort seemed to be made by the headmasters to coordinate the program or to give it a direction, other than to see that minimal standards of scheduled instruction in basic subjects occurred. Schools differed mainly in general interpersonal climate and in differing emphases on extracurricular activities and relationships with parents. For example, the school with the most secure faculty and confident leadership from the headmaster appeared to have a successful parents' organization. It had a highly successful school fair in the early spring for which there had been months of eager

preparation by children, teachers, and parents. The school with the most tentative leadership, had few extracurricular activities, the acting headmaster was skeptical of parent involvement, and there appeared to be greater anxiety among teachers about academic matters than in the other schools.

All teachers were informed that the purpose of the study was to observe how these children are taught in the Netherlands for comparison with similar observations in the United States. A research assistant was assigned to each school. In the early stages of the study both the assistants and the author made special efforts to build rapport with the headmaster, teachers, and the children. In general, excellent rapport was established. One exception occurred in which the investigators felt their presence in a class resulted in undue tension for the teacher and, as a result, sparser data were collected from that class.

After the study got under way in the Amsterdam schools, the author attempted to locate schools elsewhere in the country that might have different approaches to their curriculum and teaching methods. Two were located that had developed a reputation for innovative approaches to the teaching of 'debiels'. One, a Catholic school located in a village in a agricultural area north of Amsterdam that was developing a highly integrated curriculum based upon a philosophy of sequential mastery. The other, a public school in Rotterdam, had developed a program based on a philosophy of progressive development of both intellectual and practical skills toward self-sufficiency and vocational readiness. These schools were visited and the author conducted extensive interviews with the

headmasters, visited classes, and examined each school's system for continuous evaluation of pupil progress. It was not feasible to conduct observational studies in these schools, however, because of time and resource limitations. Findings from these schools are also reviewed below.

Procedure

Originally the plan was to focus the study on the interactions between teachers and pupils during typical classroom activities, using the Individual Cognitive Demand Schedule (ICDS). In December the research assistants were introduced to the purpose of the study and to the observation instrument. During the month of January they were to first become familiar with the schools to which they were assigned and become familiar with the observation instrument. By the time the author arrived in February the assistants were to furnish him with a report of background material on the schools and the classes, and they were expected to be familiar enough with the ICDS to begin collecting data.

Plans were changed in February after the author spent several days in each school and discussed the project with the assistants and others who were familiar with the schools. In the first place it was clear that each teacher was given considerable latitude in selecting content and in organizing the instructional program. There appeared to be no highly systematized program within any school and considerable variability both within and between schools. Furthermore, it was evident that, unlike the American classes previously studied, there was very little interactive teaching.

Children were engaged much of the time in individual seatwork, working on exercises, workbooks, text materials, and written assignments given by the teacher. Most teachers spent much time in evaluating written work, monitoring, and individual tutoring (usually too inaudible to be coded). Finally, there appeared to be a large variability among teachers in the organization of activities, in their interpersonal style, and in the way in which they used materials. In fact, it was difficult to discern a truly typical pattern to the teaching. While much of the academic work centered around the text materials, workbooks, and exercises on which children could work by themselves, there were great variations between classes in the organization of activities and in the role that the teacher played in determining what kinds of intellectual stimulation each child experienced.

In the light of initial observations of the classes and discussions with assistants and with several Dutch authorities in special education, a different plan for the research was worked out. First, it was decided that the different styles of the teachers could be described more adequately by carefully observing the organization of the various types of instructional activities during the week and noting the principal roles of pupils and teachers within each type for each classroom. The method was primarily that of "microethnography" as developed and used by Louis Smith. Within each type of instructional activity an attempt would be made to identify, classify, and, when possible, quantify the cognitive demands experienced by individual pupils.

When interactive teaching occurred, a modified version of the ICDS was used. When individual "seatwork" with text, workbook, or exercise material was the activity, a judgment was made concerning the cognitive demands made by the materials (by examination of the material). Since there was variability in the extent to which children persisted in working at seatwork assignments, quantitative records were made of on-task and off-task behavior (on a time sampling basis) with a new observation instrument developed by the author and his assistants. Since some teachers devoted a considerable amount of time to going over written work with individual children and to hearing them read, the interactions during some of these sessions were tape recorded and analyzed with the ICDS.

It was also decided that it would be necessary to conduct interviews to get a picture of how each teacher viewed the children and the purposes of instruction. This was done at several points during the five-month period. Toward the end of the period, each teacher filled in a version of the Role Construct Repertory Test (used by the author in his previous study in the Netherlands) to get a more formal measure of the teachers' perceptions of individual children.

Finally, it was decided that it would be valuable to get some formal measures of the children that could be used for comparing them with similar educable retarded children in the United States. Because of the apparent superiority of the Dutch children in their ability to work by themselves, it was speculated that they may have

learned to be more self-motivated than American children in this category. To test this, all of the children were administered a version of the Intellectual Achievement Responsibility Questionnaire, a measure of locus of control. And, in order to compare one area of academic achievement, a standardized Dutch test of arithmetic was given, (with plans to give the same test to a sample of American EMR children upon return to the United States).

Thus, the study was broadened considerably from the original plan to try to obtain a more comprehensive picture of teaching styles, and to obtain some clues as to the determinants and effects of these styles.

Findings

A complete description of the teaching styles of the eight teachers would require rather lengthy characterizations drawn from the field notes and augmented by the relatively sparse amount of quantitative observational data gathered. These characterizations would be ethnographic descriptions (in the manner of Louis Smith). Instead of such a presentation here, a summary of the salient features of each teacher's style of teaching is presented in Table 1. This is drawn from both the field notes and from observation instrument data. The central question to be answered by the data is: what is the level of intellectual stimulation (cognitive demand) in the classes observed and how are opportunities for such stimulation allocated to individual children? The headings for the columns in Table 1 are explained as follows.

Table 1 Summary of Teaching Styles

TEACHER	LEVEL OF COGNITIVE DEMAND	VARIABILITY OF COGNITIVE DEMANDS	SOURCES OF COGNITIVE DEMANDS	RICHNESS OF ACTIVITIES	PUPIL TASK INVOLVEMENT	DEGREE OF INDIVIDUALIZATION	SOURCES OF INDIVIDUALIZATION	MODES OF TEACHER INFLUENCE	SUMMARY COMMENTS
	Moderate	Varied	Materials Experience	Rich	Moderate	High	Teacher Help Assignments Grouping	Affect (+) Task Assist	A warm affectionate teacher who values direct experience and self expression for pupils
2.	Low	Flat	Materials	Restricted	Low	Low	Teacher Help	Affect (+) (-)	A motherly person who values contentment for pupils more than achievement.
	Low	Flat	Materials	Very Restricted	Low	Low	Self-Pacing	Affect (-)	An unmotivated, punitive teacher with very low expectations for pupils.
	Low	Moderate	Materials	Restricted	Very Low	Moderate	Self-Pacing Teacher Help	Affect (-)	An insecure teacher with poor control and poor organization.
	High	Varied	Teacher Experience Materials	Rich	Moderate	High	Assignments Teacher Help Self-Selection	Structure Task Assist Sharing	An accepting, open teacher with a rich program of stimulating activities.
	High	Moderate	Teacher Experience	Rich	Very High	Moderate	Assignments Teacher Help	Structure Sharing Affect (+)	Teacher with rich personal interests, an expressive-persuasive style, and exceptional organization of varied activities.
7.	Moderate	Moderate	Materials	Moderate	Moderate	Moderate	Assignments Teacher Help Grouping	Task Assist Affect (+)	An integrative person who maintains a smooth-running, calm program of conventional activities.
8.	Moderate	Varied	Materials Experience	Rich	High	High	Assignments Teacher Help Self-Selection	Task Assist Affect (+) Structure	Individualized conventional curriculum with imaginative direct-experience activities.

1. Level of Cognitive Demands. From data recorded on a modified version of the ICDS, from inferences drawn from anecdotal records, and from analysis of samples of curriculum materials, an estimate is made of the general level of cognitive demands. When the level is high, there is a prevalence of opportunities for children to engage in elaborative thinking--conceptualizing, applying rules, making inferences and hypotheses, and using their imaginations. Where the level is low, there is a heavy emphasis on simple memory, repeating verbal chains, and simple associational activity (e.g., labeling, repeating rules, repeating arithmetic tables, etc.). (The level of cognitive demand is not the same as level of difficulty. A teacher could pose very difficult tasks that were at a low cognitive level.)
2. Variability of Cognitive Demands. This is a judgment of the extent to which a teacher provided children with opportunities to engage in a variety of cognitive processes. A teacher labeled as flat provides little variety of types of intellectual stimulation (usually they perseverated at a low cognitive level).
3. Sources of Cognitive Demands. Typically most opportunities for cognitive activities in these classes came from materials--the books, exercises, and instructional objects furnished by the teacher. To a greater extent than in American classes for retarded children, these children

spent time working through printed materials, and with supplementary teaching aids. Two teachers systematically devoted a significant amount of time to discussion activities where the source of cognitive demands were the questions and problems posed by the teacher during discussion. Here the teacher is a principal source of cognitive demands. Finally, some teachers attached importance to direct experience as a source of cognitive demands. When this was the case children spent time in direct involvement in activities (projects, trips, role-playing, et al.) and were encouraged to interpret and draw conclusions from these experiences. In some cases the teacher who stressed experience devoted class time to having children recount and interpret out-of-school experiences.

4. Richness of Activities. This refers to the variety of types of activities occurring during the school week that were provided by the teacher (in addition to whatever activities had been scheduled by the headmaster for all classes--such as swimming lessons, singing, film shows, etc.). Some teachers devoted most class time to routine academic work with text materials and exercise booklets, leaving the children to their own devices when they finished their assigned work or had nothing to do for other reasons. These are characterized as restricted. Other teachers provided for field trips, dramatic play, a variety of projects, and furnished their rooms with a rich array of materials (games, for example) for self selection as a part of the planned program. They are characterized as rich.

5. Pupil Task Involvement. This is an interpretation of the extent to which children engage in purposeful activity. It is based, in part, on objective records of "on-task" and "off-task" behavior. Classes that were low in task involvement contained a high amount of random behavior, "fooling around", casual pupil talk among themselves on out-of-class experiences (playground happenings, last night's football game on TV, etc.), and teasing and bickering. Task involvement in the eight classes ranged from very high to very low.
6. Degree of Individualization. If a teacher shows a high degree of individualization it means that the children are receiving differential opportunities for cognitive experience during instructional activities. When the degree of individualization is low, all children tend to receive pretty much the same kind of stimulation--with resulting variability of success.
7. Sources of Individualization. Some teachers spent much time with individuals on their work, explaining, correcting, and selectively providing feedback on their correctness of their independent efforts. (Teacher Help). Some teachers provided differentiated assignments in curriculum materials (directions given the individual child on what to do and how to do it). In some classes (typically where there was relatively little teacher guidance) individualization was carried out

through self-pacing. Here most children used the same materials, but some proceeded much faster than others. Some teachers had ability groups within the class for some or all basic subjects. Usually this involved two or three different groups, each working with somewhat different materials. Each group received some teacher guidance. Finally, some teachers provided for individual differences by creating opportunities for children to select their own activities during academic instruction. For example, one teacher had a set of materials in language arts consisting of short activities that represented a wide range of difficulty and subject matter called (in translation) "I choose this." The materials were always available and many children used these materials regularly with free choice of task that was, on completion, typically evaluated by the teacher.

8. Modes of Teacher Influence. What are the principal ways in which the teacher exerts his influence on the pupils in his class? Some teachers depended primarily on affect..that is the communication of emotionally tinged reward and punishment (and promises and threats). In most cases where affect was an influence it was by warmth and affection...a positive emotional tone and abundant use of individual praise. In two cases the affect was negative--scolding, physical punishment, punitive use of school tasks, withdrawal of privileges, etc., and the

threat of punishment as the means of maintaining order and attention to work. A second type of influence was by provided guidance and assistance with instructional tasks (task assist), particularly where much emphasis was given to work in text materials, exercise sheets, workbooks, and the like. Some teachers devoted a large amount of time to going over individual work and helping with difficulties on an individual basis. A third mode of influence was through task structuring (task structure)--presenting information, posing problems, and designing original activities and materials that involved children in subsequent activities that were. A fourth mode of influence was sharing, spending a significant amount of time talking about personal experiences--either of children or of the teacher himself, reflecting upon and interpreting these experiences.

A study of Table 1 will reveal a number of patterns. If one believes that an optimal learning environment for these children is one that is intellectually stimulating, varied, individualized and encourages a high degree of task involvement, then it appears that the teachers with the best environment for learning are those with varied resources and whose influence on children is multi-dimensional. In other words, these teachers seem to be able to plan and organize a variety of activities and their direct influence on children is through their skills in structuring activities, helping

individual children as work proceeds, and providing positive emotional support. The most restricted learning environments are those that depend mainly on standard curriculum materials (texts, workbooks, exercises, etc.) and where the teacher's influence is the authoritarian manipulation of affectively toned rewards and punishments.

When the principal source of cognitive demands is the formal curriculum material (usually printed text and workbook exercises), then there would appear to be two determinants of the overall level and variety of cognitive demands experienced by individual children. First, the material itself as interpreted and responded to by the child can evoke various kinds of cognitive responses from the child. Second, when instruction consists mainly of independent work with curriculum materials, then the extent to which the child persists with the material will affect the amount of cognitive activity made possible by the materials. In those classes in which the principal or sole source of cognitive demands was curriculum materials, there appeared to be considerable variability among children in the persistence and attentiveness to the material. From the quantitative records of "on-task" and "off-task" behavior, there are usually three or four children in the class who seem to have considerable difficulty working by themselves. On the other hand, there were a large number of amazingly persistent children. If one can infer that the persistent child is receiving rather concentrated opportunities for some kind of purposeful cognitive activity, then the value of self-instructional materials seems high.

The author devoted some time to perusal and analysis of text and workbook activities in language arts and in arithmetic. Dutch materials designed for the elementary schools differ considerably in the variability of cognitive demands made. The newer materials tend to provide greater variety and sequencing of cognitive demands. However there is not at present a sufficient sample or analysis on which to base a confident generalization or comparison with American materials. (An analysis of curriculum materials from the point of view of their cognitive demands would seem to be a valuable type of research yet to be done.) Even when one is quite certain of the cognitive level of text materials, it is always possible that children transform them into something simpler. (In fact, there is a Dutch study by F. W. Prins that suggests that this is exactly what happens, especially with less able children.)

Comparison With American Classes. Two striking differences appeared. First, Dutch teachers appear to depend much less on recitation, discussion, and individual interactive tutoring in carrying out instruction. Three of the teachers in the sample used group discussions regularly every day. Two of them had developed a high degree of skill in posing problems, eliciting high level responses from every child, and providing very differentiated feedback and elaboration on children's contributions. They were among the most skilled teachers in interaction the author had ever observed. The third teacher was highly skilled in drawing out spontaneous expressions of experiences and feelings of children, but did not stimulate the complex variety of cognitive activity shown by the other two teachers. In these classes the cognitive demand level tended to be high anyway.

In most of the other classes the cognitive demand level was low to moderate, depending largely on the kinds of instructional materials used. Because there are no comparable observational data on the ICDS it is difficult to venture any definitive statement. Impressionistically, it appears that the cognitive level in the Dutch schools (coming mainly from materials) is slightly higher.

The second difference is in the degree of self-direction and persistence demonstrated by the Dutch children. It appeared that the teachers of these mildly retarded children did not have to spend as much time as American teachers in directing and monitoring their daily academic activities. In most classes children seemed to know what they must do, and went about doing it without much prompting by the teacher. The reasons for this are obscure. But it suggests that a study of teacher roles and patterns of influence in the kindergarten and first grade might reveal some of the reasons for the findings obtained in these classes (and presumably what would be found in regular elementary classes).

The locus of control measure did not indicate that these children had higher levels of internal locus of control. On the contrary, when compared with American EMR children of the same ages, the Dutch sample showed a slightly lower level of internal locus of control (higher external locus of control). This suggests that the self-directed behaviors of the Dutch children may be under the control of a subtle set of reinforcement contingencies that exist in most classrooms and are under the teacher's control.

Innovative Schools

The two schools that were identified as innovative in developing improved approaches to teaching the mildly retarded were both under the direction of dedicated, forceful headmasters. One, a Catholic school serving a rural area, had developed its own curriculum in the language arts and mathematics areas. These were attempts to develop integrated, sequential program stressing heirarchical development of intellectual competencies and appropriate evaluation devices to monitor individual progress. The teachers and headmaster met regularly on both curriculum development and individual pupil assessment. Brief visits to classes suggested that the teaching was skilled and intellectually stimulating.

The second school, a public school in Rotterdam, was also working on curriculum development, with a greater emphasis on individualized work that helped children toward mastery that would fit them for vocational training in the early secondary school years.

Both schools manifested high esprit de corps among teachers. One had the feeling that if the headmaster were to leave, the system would quickly disappear.

Conclusions

In an educational system that has established rather clear-cut procedures for identifying mildly retarded children and placing them in special, segregated schools, there is remarkably little consistency in the pedagogical theory, curriculum, or teaching

style in Dutch schools. As in the United States, there has evolved a "conventional wisdom" that a definable class of handicapped children exists called "retarded." They do not belong in the regular elementary school class. But no systematic program or teaching approach has emerged for these children. Also, as in the United States, this marginal group of "handicapped" occupy that status principally during the elementary and early secondary school years. Most mildly retarded later become assimilated as they enter the adult world of work.

In the absence of systematic pedagogical theory and program development for the mildly retarded, much reliance is placed upon the individual teacher for working out a program of instruction and other educational experiences and for developing a style of personal influence that works best for that teacher. The consequence is enormous variability among teachers. Again we see a similarity to the United States.

Despite the similarities between the two countries, there are some important differences in teaching styles and in the responses of children to those styles. First, for reasons that are obscure, most Dutch children seem to learn a set of work habits that make possible more self-directed learning activities in the classroom (with curriculum materials that have fewer interest-arousing features and that appear to be somewhat more difficult cognitively than American materials). The teachers appear to be less dependent upon active verbal interaction in guiding instruction. One hypothesis to explain this is that in the Netherlands there is a

firmer tradition of formal academic study that pervades the entire system from the university down through the elementary school. Perhaps in some ways children learn early in their school career that serious study habits are important and they see enough models of such behavior in both family and school that they can begin to emulate them rather early. The somewhat more authoritarian role of the teacher in that society--a benevolent, firm, paternalistic role--undoubtedly reinforces these patterns.

If the above hypothesis is correct, it raises interesting questions about the consequences for children's intellectual and motivational development. For example, would a comparison of academic achievements of mildly retarded children in the Netherlands and the United States reveal differences in mastery in basic school subjects? Would the differences show up in measures of cognitive style and learning strategies with novel material?

The evidence of different teaching styles uncovered in this study point to several avenues of investigation that should be explored. Typically the teachers of mildly retarded in the Netherlands receive little systematic preparation for their roles. Yet several of the teachers observed manifested high levels of ability to organize stimulating programs of activities and played effective interpersonal roles with their children. How did they come to attain such competence? There is little suggestive evidence in our study. But it is tempting to hypothesize that the teachers who succeeded in creating a blend of cognitively rich activities, guided intellectual stimulation, and supportive, warm

relations with their pupils somehow had arrived at a set of strong values and beliefs that were strongly motivating and had become a part of the teacher's ego system. This set of convictions has made possible a "way of life" that maintains itself in spite of a low prestige job with relatively little institutional and collegial support, and an absence of technical resources for conducting a systematic educational program for these children. These suppositions lead to some interesting speculations concerning the content of teacher education programs and it seems to have implications for the recruitment and selection of persons well suited for working with those children who suffer handicapping conditions which are as much a product of peculiarities of the educational system as they are of the child's inherent developmental potential.